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09/965,073	09/28/2001	Yuki Wakita	214491US2X	3398
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EXAMINER				
PESIN, BORIS M				
ART UNIT		PAPER NUMBER		
2174				
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11/28/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

# Office Action Summary

**Application No.**

09/965,073

**Applicant(s)**

WAKITA ET AL.

**Examiner**

BORIS PESIN

**Art Unit**

2174

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-35, 37, 38 and 41-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-35, 37, 38 and 41-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-884)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This communication is responsive to the response filed 9/12/2008.

Claims 32-35, 37-38, and 41-51 are pending in this application. Claims 32, 35, 41, 49, 50, and 51 are independent claims. In the response filed 9/12/2008, claims 32, 35, 41, 49, 50, and 51 were amended. This action is made Non-Final because of the new 35 USC § 101 rejection.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. See MPEP 2106.01

Claims 49, 50, and 51 are rejected under 35 U.S.C. 101 because the claims are directed towards non-statutory subject matter. Claims 49, 50, and 51 are directed to the program itself, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality. It is also clearly not directed to a composition of matter. Therefore, it is non-statutory under 35 US 101.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 32-35, 37-38, and 41-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Brozowski et al. (US 6559871).

In regards to claim 32, Brozowski teaches an object content structure management method for managing a content structure of a root object comprising:

expressing the content structure of said root object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5) ;

defining an attribute capable of being held by said parent and child objects for each of a plurality of object types and each of the plurality of object types by a schema definition (Column 6 Lines 24-64);

managing a list of child objects capable of being held by said root object and defined by said schema definition (Column 6 Lines 24-64); and

sequentially managing a list of first child objects of one of said one or more parent objects as a start object, a list of the first child objects of each start object held by the list of the first child objects, and a second list of child objects of each first child object held by a second list of child objects of the first child objects, thereby managing a content structure of said start object, (See Figure 2 and Column 5, Line 51- Column 6 Line 5)

wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48); and one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure (See Figure 2, since the minimum number of child object that can be held is one, that object is displayed on the screen).

In regards to claim 33, Brozowski teaches an object content structure management method according to claim 32, wherein: placeholders indicate objects that can exist as said child objects and are managed one by one for each object of a same type (Column 13, Lines 21-48).

In regards to claim 34, Brozowski teaches an object content structure management method according to claim 32, further comprising: managing a plurality of objects including an exclusively selectable object that is capable of being held by a

certain parent object by a schema definition of said parent object as a choice list besides said list of child objects (See Figure 2);

managing an object selected from among a plurality of choices by a list of child objects of a parent object and managing objects other than said selected object of the choices as said placeholders indicating objects that can exist as child objects in the choice list of said selected object (See Figure 2).

In regards to claim 35, Brozowski teaches an object content structure display method for displaying a content structure of a root object comprising:

expressing the content structure of said object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5);

defining an attribute capable of being held by said parent and child objects for each of a plurality of object types and a type of said object by a schema definition, wherein (Column 6 Lines 24-64):

objects held by said root object as child objects are expressed by a tree structure (Column 5, Line 51- Column 6 Line 5);

a character string representing this object type is displayed on each node of the tree structure to display a structure of the object (See Figure 2); and

a type and a value of the attribute capable of being held by an object selected from the displayed tree structure are displayed (See Figure 2); and

wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48); and one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure (See Figure 2, since the minimum number of child object that can be held is one, that object is displayed on the screen).

In regards to claim 37, Brozowski teaches an object content structure display method according to claim 35, wherein: said tree structure is expressed hierarchically for objects to be held by said root object serving as a root configured to further hold objects (See Figure 2); and structures below the actually existing instance objects are displayed up to a hierarchical level designated at a time of hierarchically displaying said tree structure and display of structures below the designated hierarchical level is omitted (See Figure 2, the user chooses which nodes to see or not).

In regards to claim 38, Brozowski teaches an object content structure display method according to claim 35, wherein: any one of a plurality of types of objects may be held under a schema definition of types of child objects capable of being held by the root object (See Figure 2 and Column 13, Lines 21-48); all objects of choices are displayed in a tree structure as child nodes and the objects actually selected and held among the choices and the unselected choices are discriminated from each other by different icons and then displayed (See Figure 2 and Column 13, Lines 21-48).

In regards to claim 40, Brozowski teaches an object content structure display method according to claim 35, wherein: a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48); and one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure (See Figure 2).

In regards to claim 41, Brozowski teaches an object content structure editing method for editing a content structure of a root object comprising:

expressing the content structure of said object by a tree-structure set membership consisting of one or more objects, said one or more objects comprising one or more parent objects and one or more child objects, each child object respectively corresponding to one of said one or more parent objects (Column 5, Line 51- Column 6 Line 5);

defining an attribute capable of being held by said parents and child objects for each of a plurality of object types and a type of said object by a schema definition (Column 6 Lines 24-64), wherein

objects held by said parent object as child objects are expressed by a tree structure (See Figure 2);

a character string representing the object type is displayed on each node of the tree structure to display a structure of the object (See Figure 2);



a type and a value of an attribute capable of being held by an object selected from the displayed tree structure are displayed (See Figure 2 and Column 13, Lines 21-48);

and a value to be changed is inputted and a change is indicated for said displayed attribute value, and the attribute value of the object is updated to the input value (Column 13, Lines 49-58);

an addition is indicated after designating one dummy object indicating types of objects which can be held (Column 13, Lines 21-48, and Column 13, Lines 49-58);

wherein a plurality of child objects of a same type may be held under a schema definition of types of the child objects capable of held by the root object (Column 13, Lines 21-48); and one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure (See Figure 2, since the minimum number of child object that can be held is one, that object is displayed on the screen).

In regards to claim 42, Brozowski teaches an object content structure editing apparatus according to claim 41, wherein: an instance addition is indicated after one of the objects existing in the tree structure is designated (Column 13, Lines 49-58); and an instance object of the same type as a type of the designated object is created and the object of the same type is displayed as a fraternal node of said designated object in the tree structure (Column 5, Line 51- Column 6 Line 5 and Column 13, Lines 49-58).

In regards to claim 43, Brozowski teaches an object content structure editing method according to claim 42, wherein: an object permitted to be held as a plural by the

schema definition is discriminated from an object prohibited from being held as a plural by the schema definition using different display colors or different icons prior to being displayed; and instance addition indication is not accepted in cases of objects prohibited from being held as a plural (Column 13, Lines 49-58).

In regards to claim 44, Brozowski teaches an object content structure editing method according to claim 41, wherein: said designated dummy object is changed to an actual instance; and an icon of said designated dummy object is changed to an icon indicating the actual instance in the tree structure (See Figure 2 and Column 13, Lines 21-48).

In regards to claim 45, Brozowski teaches an object content structure editing method according to claim 44, wherein: not only said designated dummy object but also ancestor objects of said designated dummy object are dummy objects (Column 13, Lines 21-48); and the ancestor objects are sequentially changed to instances (Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 46, Brozowski teaches an object content structure editing method according to claim 41, wherein:

deletion is indicated after designating the object selected from the displayed tree structure (See Figure 2, the user is able to select which items to view or not using the + sign);

said designated object is held as a plural (See Figure 2);

structures below the objects are deleted and display of the objects is deleted from the tree structure (See Figure 2, the user is able to select which items to view or not using the + sign);

the deletion is indicated after designating the actually existing object and said designated object is a single object (See Figure 2);

and nodes below the designated object are changed to dummy objects and display icons of the nodes in the tree structure are changed (Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 47, Brozowski teaches an object content structure editing method according to claim 41, wherein: a selection change is indicated after one of dummy objects indicating unselected choices is designated (See Figure 2); and the objects selected before the selection change are changed to the objects indicating choices and said designated object is changed to a selected object (See Figure 2, and Column 13, Lines 21-48, and Column 13, Lines 49-58).

In regards to claim 48, Brozowski-Gudmundson teach all the limitations of claim 41. Brozowski-Gudmundson do not specifically teach that edited object contents are outputted by a description language, the description language being an MPEG-7 description language or an XML description language. Official notice is given that it is well known in the art to output contents of an object in XML description language. It would have been obvious to one of ordinary skill in the art to modify Brozowski-Gudmundson and to output contents of an object in XML description language with the motivation to provide the user with greater flexibility.

Claim 49 is in the same context as claim 32; therefore it is rejected under similar rationale.

Claim 50 is in the same context as claim 35; therefore it is rejected under similar rationale.

Claim 51 is in the same context as claim 41; therefore it is rejected under similar rationale.

### ***Response to Arguments***

Applicant's arguments filed 9/12/2008 have been fully considered but they are not persuasive.

In regards to the Applicant's argument that Brozowski does not teach "one of a maximum number and a minimum number of the child objects capable of being held are displayed in said tree structure," the Examiner respectfully disagrees. Since the claim requires one of a maximum or a minimum, Brozowski clearly teaches at least one child object (minimum) being held and displayed in the tree structure (See Figure 2).

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BORIS PESIN whose telephone number is (571)272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris Pesin/  
Examiner, Art Unit 2174